

IN THE CLAIMS

Please cancel all pending claims and enter new claims 32-44 as follows:

1-31. (Canceled)

32. (New) An isolated nucleic acid molecule comprising a nucleic acid sequence selected from the group consisting of:

(a) a nucleic acid sequence encoding a protein consisting of SEQ ID NO:4, SEQ ID NO:7 or SEQ ID NO:12; and

(b) a nucleic acid sequence complimentary to the nucleic acid sequence of (a).

33. (New) The isolated nucleic acid molecule of claim 32, wherein said nucleic acid sequence is selected from the group consisting of SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO:3, SEQ ID NO:5, SEQ ID NO:6, SEQ ID NO:8, SEQ ID NO:10, SEQ ID NO:11 and SEQ ID NO:13.

34. (New) An isolated nucleic acid molecule consisting a nucleic acid sequence selected from the group consisting of:

(a) a nucleic acid sequence encoding a protein consisting of SEQ ID NO:4, SEQ ID NO:7 or SEQ ID NO:12; and

(b) a nucleic acid sequence complimentary to the nucleic acid sequence of (a).

35. (New) A fragment of the isolated nucleic acid molecule of claim 34, wherein said fragment is at least 35 nucleotides in length.

36. (New) A fragment of the isolated nucleic acid molecule of claim 34, wherein said fragment is at least 45 nucleotides in length.

37. (New) The isolated nucleic acid molecule of claim 34, wherein said nucleic acid sequence is selected from the group consisting of SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO:3, SEQ ID NO:5, SEQ ID NO:6, SEQ ID NO:8, SEQ ID NO:10, SEQ ID NO:11 and SEQ ID NO:13.

38. (New) A fragment of the isolated nucleic acid molecule of claim 37, wherein said fragment is at least 35 nucleotides in length.

39. (New) A fragment of the isolated nucleic acid molecule of claim 37, wherein said fragment is at least 45 nucleotides in length.

40. (New) An isolated protein comprising an amino acid sequence selected from the group consisting of SEQ ID NO:4, SEQ ID NO:7 and SEQ ID NO:12.

41. (New) An isolated protein consisting of an amino acid sequence selected from the group consisting of SEQ ID NO:4, SEQ ID NO:7 and SEQ ID NO:12.

42. (New) A fragment of the protein of claim 41, wherein said fragment is at least 35 amino acids in length.

43. (New) A fragment of the protein of claim 41, wherein said fragment is at least 50 amino acids in length.

44. (New) A method to detect an inhibitor of octopamine receptor activity, said method comprising:

- (a) contacting a protein comprising SEQ ID NO:12 with a putative inhibitory compound under conditions in which, in the absence of said compound, said protein has octopamine receptor activity; and
- (b) determining if said protein has octopamine receptor activity.